Claims:

1. A trampoline enclosure system comprising:

a trampoline having a rebounding surface and a plurality of vertically-extending legs which support the rebounding surface at an elevation above ground level;

a plurality of posts, each post (a) being secured to one of the legs, and (b) having an upper end portion, a wall support portion located above the level of the surface, a lower portion located below the level of the surface;

a plurality of leg fasteners which secure the posts to the legs;

a flexible top line which extends between the upper end portions of adjacent posts; and

a generally cylindrical wall made of a flexible material which is secured to the wall support portions of the posts and to the top line so that the wall defines a chamber above the rebounding surface.

2. The system of claim 1 wherein the wall comprises a continuous expanse of the flexible material, except that the wall defines an opening for permitting a user of the trampoline to enter and leave the chamber.

3. The system of claim 1 wherein the top line is a strap of nylon webbing, thereby providing relatively inelastic coupling of said upper end portions.

4. The system of claim 1 further comprising a clamp which presses the top line against one of the posts to secure the line to the post.

5. The system of claim 1 further comprising a buckle which defines an opening through which a loop of the top line extends, which loop and buckle together are positioned to chokingly surround the post when the line is taught.

6. The system of claim 1 further comprising an bracket secured on one of the posts, the bracket defining at least one opening to receive the top line.

7. The system of claim 1 wherein:

a circumferential neck channel extends at least partially around at least one of the posts; and

the top line nests in the channel.

8. The system of claim 1 further comprising a flexible bottom line which is attached to the wall and which extends between adjacent posts at a level below the top line.

9. The system of claim 8 wherein the bottom line is a strap of webbing.

10. The system of claim 1 wherein the flexible material is a mesh.

11. The system of claim 1 wherein the flexible material is plastic safety fencing.

12. The system of claim 11 wherein the top line is interlaced through openings in the fencing.

13. The system of claim 11 further comprising a flexible bottom line which (a) extends between adjacent posts at a level below the top line and (b) is interlaced through openings in the fencing.

14. The system of claim 11 further comprising a post securement line which (a) wraps helically around the wall support portion of one of the posts and (b) is interlaced through openings in the fencing to secure the fencing to the post at multiple elevations.

15. The system of claim 1 wherein the wall support portions are sheathed by a layer of padding material.

16. The system of claim 1 further comprising shock absorption elements which allow the wall support portions to move a limited distance outwardly from the center of the chamber when force is applied from within the chamber.

17. The system of claim 16 wherein each leg fastener comprises (a) a block having two vertically-extending channels which are shaped respectively to partially receive a leg and to partially receive a post, (b) a first retainer shaped to wedgingly secure the leg in one of the channels, 8 a second retainer shaped to wedgingly secure the post in the other channel, and (d) at least one spring mounted to serve as a shock absorption element so that the post can move a short distance relative to the leg when a sufficient force is applied to overcome the urging of the spring.

18. The system of claim 1 further comprising a frame which surrounds the surface and is supported by the legs, the surface being provided by a sheet of fabric which is stretched on the frame.

19. The system of claim 18 wherein the posts are secured to the frame or legs by cable ties and resilient members are provided between the cable ties and the posts such that a post can move a short distance relative to the leg when a sufficient force is applied on the wall support portion of the post to compress the resilient member.

20. The system of claim 18 wherein each post is secured to both the frame and one of the legs.

21. The system of claim 1 wherein:

the surface is provided by a sheet of fabric which is supported by a frame which surrounds the surface and is supported by the legs; and

the posts are secured to the frame by cable ties.

22. The system of claim 1 wherein the posts are secured to the legs by cable ties.

23. The system of claim 1 wherein:

the leg fasteners are pipe clamps, each pipe clamp being a hinge having two wings with each wing having a free end portion, the wings together defining a passageway between the wings, which passageway receives both a leg and a post and is located such that the free ends of the wings are located opposite one another when the leg and the post are clamped between the wings; and

each pipe clamp further comprises at least one bolt which secures the ends of the wings together and thereby wedgingly holds a leg and a post together in the clamp.

24. The system of claim 1 wherein:

the leg fasteners are pipe clamps, each pipe clamp comprising a girdle which defines two passageways which receive one of the legs and one of the posts respectively; and

each pipe clamp further comprises at least one tightener operable to reduce the cross-sectional areas of the passageways and thereby chokingly hold the leg and the post together in the clamp.

25. The system of claim 1 further comprising a plurality of cross braces, each cross brace having an upper end and a lower end located at an elevation below the

upper end, the upper and lower end of each cross-brace being connected respectively to the wall support portion of two adjacent posts.

26. The system of claim 25 wherein:

the cross braces are flexible lines;

the upper ends of the cross braces are attached to the upper ends of the posts; and

the lower ends of the cross braces are attached at the bottoms of the wall support portions of the posts.

27. The system of claim 1 further comprising an end cap at the top of the upper end portion of each post.

28. The system of claim 27 wherein each end cap has a shock absorbing element positioned so that the cap descends for a short distance when downward pressure is applied to the end cap.

29. The system of claim 1 further comprising an awning which extends over the chamber and which is supported by at least some of the posts.

30. The system of claim 1 further comprising a basketball backboard supported by at least one of the posts.

31. The system of claim 1 further comprising a divider wall which extends between two of the wall support portions and divides the chamber to form two compartments.

32. The system of claim 1 further comprising:

a generally vertically-extending interior post; and

an interior post support structure which holds the interior post at a position inside the chamber.

33. A trampoline enclosure system comprising:

a trampoline having a generally horizontal rebounding surface provided by a sheet of stretched fabric;

a frame on which the fabric is stretched;

a plurality of posts, each post (a) being pivotally mounted to the frame, and (b) having an upper end portion, a wall support portion located above the level of the

surface, a lower portion located below the level of the surface, and a lower end portion;

a flexible top line which extends between the upper end portions of adjacent posts; and

a generally cylindrical wall made of a flexible material which is secured to the wall support portions of the posts and to the top line so that the wall defines a chamber above the rebounding surface.

34. The system of claim 33 further comprising:

multiple anchor points located at fixed positions relative to the frame, one of the anchor points being located adjacent to the lower end portion of each post; and

a resilient member connected between the lower end portion of each post and an adjacent anchor point such that the resilient member urges the lower end portion to a fixed position and is deformable to allow the wall support portion of the post to move a limited distance outwardly from the center of the chamber when force is applied to the post from within the chamber.

35. The system of claim 33 further comprising resilient members which connect the top line to the posts.

36. The system of claim 33 wherein the top line is a rigid hoop.

37. The system of claim 36 wherein the hoop is circular.

38. The system of claim 33 wherein the posts are fastened to the frame by cable ties.

39. The system of claim 33 wherein:

the system further comprises multiple anchor points located below the frame at fixed positions relative to the frame;

the lower end portion of each post is connected to an anchor point;

the posts are secured to the frame by cable ties; and

resilient members are provided between the cable ties and the posts such that a post can move a short distance relative to the frame when a sufficient force is applied on the wall support portion of the post to compress the resilient member.

40. The system of claim 33 wherein:

the system further comprises multiple anchor points located below the frame at fixed positions relative to the frame;

the lower end portion of each post is connected to one of the anchor points;

at least one post is fastened to the frame by an elastic member which has an elongated body and which defines first and second openings defined at opposite ends of the body, the first opening containing the post at a location above the frame, the second opening containing the post at a location below the frame and the body extending at least partially around the frame so that the elastic member holds the post and the frame together and so that the post can move a short distance relative to the frame when a sufficient force is applied on the wall support portion of the post to compress the stretch the elastic member.

41. The system of claim 33 further comprising an end cap at the top of the upper end portion of each post.

42. The system of claim 41 wherein each end cap has a shock absorbing element positioned so that the cap descends for a short distance when downward pressure is applied to the end cap.

43. A trampoline enclosure system comprising:

a trampoline having a generally horizontal rebounding surface provided by a sheet of stretched fabric;

a frame on which the fabric is stretched;

a plurality of posts which support the rebounding surface at an elevation above ground level, each post (a) being mounted to the frame, and (b) having an upper end portion, a wall support portion located above the level of the surface, a lower portion located below the level of the surface, and a lower end portion which rests on the ground;

a flexible top line which extends between the upper end portions of adjacent posts; and

a generally cylindrical wall made of a flexible material which is secured to the wall support portions of the posts and to the top line so that the wall defines a chamber above the rebounding surface.

44. The system of claim 43 further comprising an end cap at the top of the upper end portion of each post.

45. The system of claim 44 wherein each end cap has a shock absorbing element positioned so that the cap descends for a short distance when downward pressure is applied to the end cap.

46. A trampoline system comprising:

a trampoline having a rebounding surface;

a plurality of posts spaced around the rebounding surface, each post (a) extending generally vertically, and (b) having an upper end portion and a wall support portion located above the level of the surface;

a generally cylindrical wall made of a flexible material; and

a plurality of sleeves attached to the wall, the sleeves being sized and positioned such that when wall support portions of the posts are received in the sleeves, the wall defines a chamber above the rebounding surface.

47. A trampoline system comprising:

a trampoline, including a substantially horizontal frame having a rebounding surface coupled thereto, and plural legs positioning the frame above the ground;

a fence support structure including plural support members;

wherein at least one of said support members is coupled by a first removable fastener to a leg, and by a second removable fastener to the frame.

48. The system of claim 47 wherein each of said first and second removable fasteners includes at least one U-bolt.

49. A trampoline system comprising:

a trampoline having a rebounding surface;

a fence support structure including plural support members;

an elongated resilient member coupling plural of said support members at upper portions thereof; and

a tensioning device for changing the length of the resilient member, and thus the tension provided thereby.

50. A trampoline system comprising:

a trampoline having a rebounding surface;

a fence support structure including plural support members;

an elongated resilient member coupling plural of said support members;

wherein the elongated resilient member is relatively flat, providing an increased surface area to reduce cutting injuries, and tending to automatically rotate to present a flat face towards any impacting body.

51. A trampoline system comprising:

a trampoline having a rebounding surface;

a fence support structure including plural support members;

fence netting having plural openings, the netting being coupled to one of said support members by a continuous length of elastic cord that passes through plural of said openings.

52. The system of claim 51 in which the elastic cord has first and second ends fixedly disposed relative to said support member, and the cord threads in and out openings of the fence netting near the associated upright, the system further including a flexible strap member helically wrapping around said support member and coupling the cord thereto at plural intermediate points therealong.

53. A trampoline system comprising:

a trampoline having a rebounding surface;

a fence support structure including plural support members;

fence netting coupled to the support structure and defining a chamber above the rebounding surface, the netting further defining a door flap permitting access to said chamber; and

a lock for securing the door flap in a closed position, thereby impeding unauthorized access to said chamber.

54. A trampoline system comprising:

a trampoline having a rebounding surface;

a fence including plural support members with fence netting coupled thereto, said support members having resilient sheaths therearound, the netting being coupled to each support member through said resilient sheath at plural points therealong;

wherein an impact by a jumper against the fence nearest to a first support member is absorbed, in part, by resilient sheaths on plural support members remote from the first.

55. The system of claim 54 in which the netting is coupled to each sheath through an elongated strap member helically wrapped therearound, the strap distributing force over a larger area of the resilient sheath than a cord, thereby cutting less into the resilient sheath, and providing area of the sheath to absorb said impact.

56. A trampoline system comprising:

a circular trampoline having a rebounding surface;

a safety fence including a support structure with fence netting coupled thereto, the support structure including plural vertical members, the fence netting defining a volume therein;

the support structure further including a pair of flexible diagonal bracing members extending downwardly from near the top of at least one of said vertical members;

there being an imaginary plane passing symmetrically between said diagonal bracing members and including said vertical member and the center of said rebounding surface;

said diagonal bracing members:

(a) permitting limited flexure of the top of said member towards said volume in at least certain directions not in said plane;

(b) permitting more flexure of the top of said member towards said volume within said plane; and

(c) permitting substantially no flexure of the top of said member away from said volume.

57. A trampoline system comprising:

a horizontal rebounding surface; and

a substantially vertical rebounding surface defining a chamber above the horizontal rebounding surface, the vertical rebounding surface having a horizontal rebound factor of at least 10%.

58. The system of claim 57 in which the vertical rebounding surface has a rebound factor of at least 20%.

59. The system of claim 57 in which the vertical rebounding surface has a rebound factor of at least 30%.

60. The system of claim 57 in which the vertical rebounding surface has a rebound factor of at least 40%.

61. A trampoline system comprising:

a rebounding surface;

a fence defining a chamber above the rebounding surface, the fence including plural upright poles and netting coupled thereto, each of the poles being sheathed in a resilient material; and

an end cap on the top of each pole and including a sleeve downwardly extending over at least a top portion of the sheath, thereby preventing water from traveling between the outside of the pole and the inside of the sheath with attendant premature weathering of the sheath.

62. A trampoline system comprising:

a rebounding surface coupled to a surrounding frame by plural spring members; and

a fence including plural vertical supports, each of the supports having shock absorbing padding therearound, the fence defining a chamber above the rebounding surface;

wherein the fence prevents users from accidentally impacting any of the spring members.

63. A trampoline system comprising:

a trampoline having a rebounding surface; and

a fence including plural support members and a wall material coupled thereto, the wall material defining an enclosed chamber;

wherein tops of at least certain of said support members are independently movable, rather than being rigidly coupled to other support members, so that an impact midway up the wall material at any position therearound causes tops of remote support members to deflect towards said impact.

64. A trampoline system comprising:

a rebounding surface; and

means for forming a safety fence therearound.